**DEMONSTRATIONS IN SCIENCE**

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| 1. What are the reasons why you would use a demonstration in a science classroom? |
| 1. What are the desirable features of a good demonstration? |
| 1. What are discrepant events? |
| 1. Why might you use discrepant events in a classroom? |

**What is the role of the teacher when using a discrepant event in your classroom?**

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| 1. **Establish the Environment:** |
| 1. **Allow Students to Interact with Each Other and the Phenomenon** |
| 1. **Model Selection** |

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| 1. What are the reasons why you would use a demonstration in a science classroom?  * To illustrate * To clarify * To catch attention * To motivate * To review * To save time * To save materials * For safety reasons * As per ***Madelaine Hunter’s model*** * Others? |
| 1. What are the desirable features of a good demonstration?  * Works * Is visible * Involves students * Motivates students * Is simple * Is on topic * Good “show personship” * Materials well organized * Includes student interaction * Leads to a student record * Observations vs. inferences * Nurtures process * Others? |
| 1. What are discrepant events?  * A set of unresolved relations * Things that fit and don’t fit * A contradiction of everyday experience * A logical hypothesis or prediction that fails |
| 1. Why might you use them in a classroom?  * Organizer * Grabber * Focus on topic * Discussion item * Through provoker |

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**What is the role of the teacher when using a discrepant event in your classroom?**

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| 1. **Establish the Environment:**   Nurture student predictions. Set up a contrast. Use common materials. Ensure visibility. Identify problems |
| 1. **Allow Students to Interact with Each Other and the Phenomenon**   Form groups of 4-6 students. Have them build a model to account for their observations. Have them present their models. You can also do this as a class and discuss models as a whole. |
| 1. **Model Selection**   Challenge models on the basis that they have (i) account for observations made and (ii) agree with the theories or models previously developed by the class. |

**Discrepant Events from** <http://www.agpa.uakron.edu/k12/best_practices/discrepant_events.html>